



YOUR OFFICE PARTNER

INSTRUCTION HANDBOOK

BASIC



COLOUR PRINTER

CLP 3416

PLEASE READ THE INSTRUCTION HANDBOOK
CAREFULLY BEFORE USING THIS MACHINE. KEEP IT
CLOSE TO THE MACHINE FOR EASY REFERENCE.



Contents

1	Installation	
	Unpacking the printer	1-2
	Installing the Toner Container and Waste Toner Box	1-4
	Making the connections	1-7
2	Machine Parts	
	Components at the Front of the Printer	2-2
	Components at the Left of the Printer	2-3
	Internal Components	2-4
	Components at the Rear of the Printer	2-5
3	Printing Operation	
	Loading Printer Driver	3-2
	Printing from Application Software	3-3
4	Maintenance	
	General Information	4-2
	Toner Container Replacement	4-3
	Cleaning the Printer	4-8
	Replacing the Waste Toner Box	4-15
5	Troubleshooting	
	General Guidelines	5-2
	Print Quality Problems	5-3
	Error Messages	5-7
	Clearing Paper Jams	5-14
6	Specifications	

Legal and Safety Information

CAUTION: NO LIABILITY IS ASSUMED FOR ANY DAMAGE CAUSED BY IMPROPER INSTALLATION.

Notice on Software

SOFTWARE USED WITH THIS PRINTER MUST SUPPORT THE PRINTER'S EMULATION MODE. The printer is factory-set to emulate the PCL. The emulation mode can be changed by following the procedures described in The *Using the Operator Panel* in the *Advanced Operation Guide*.

Notice

The information in this guide is subject to change without notification. Additional pages may be inserted in future editions. The user is asked to excuse any technical inaccuracies or typographical errors in the present edition.

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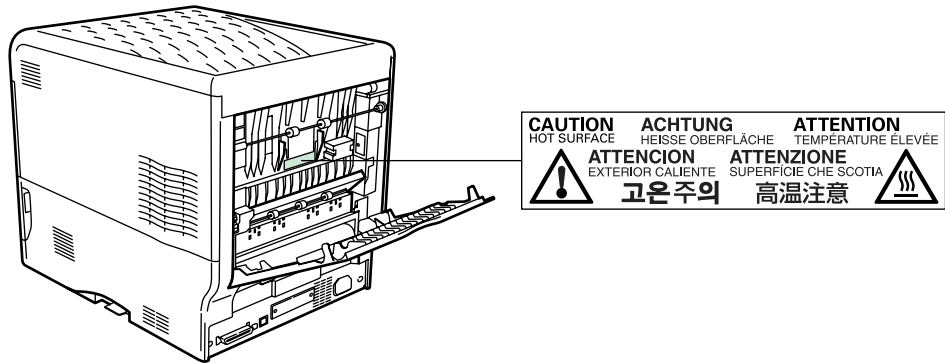
Interface connectors

IMPORTANT: Be sure to power off the printer before connecting or disconnecting an interface cable. For protection against static electricity discharge to the printer's internal electronics through the interface connector(s), cover any interface connector that is not in use with the protective cap supplied.

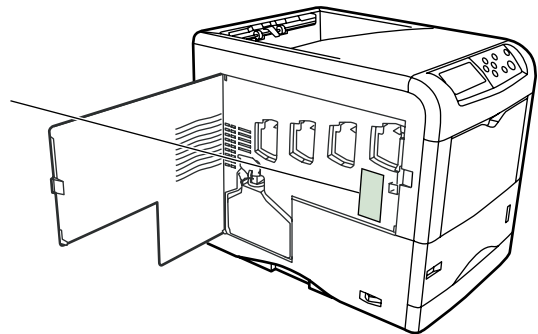
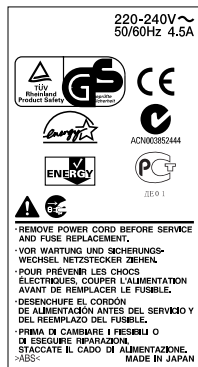
NOTE: Use shielded interface cables.

Cautionary Labels

The printer bears any of the following labels.



For Europe, Asia, and other countries
(except U.S.A and Canada)



Ozone concentration

The printers generate ozone gas (O₃) which may concentrate in the place of installation and cause an unpleasant smell. To minimize the concentration of ozone gas to less than 0.1 ppm, we recommend you not to install the printer in a confined area where ventilation is blocked.

CE Marking Directive

According to Council Directive 89/336/EEC and 73/23/EEC

UTAX GmbH
Ohechaussee 235
22848 Norderstedt, Germany

Declares that the product

Product name: Color Page Printer

Model number: CLP 3416 (as tested with enhancement optional units;
Duplex unit DU-300/DU-301, Paper Feeder PF-60)

Conforms to the following product specifications:

EN 55 022: 1998 Class B
EN 61 000-3-2: 2000
EN 61 000-3-3: 1995
EN 55 024: 1998
EN 60 950: 2000

The manufacturer and its merchandising companies retain the following technical documentation in anticipation of the inspection that may be conducted by the authorities concerned.

User's instruction that conforms to the applicable specifications.

Technical drawings.

Descriptions of procedures that guarantee conformity.

Other technical information.

ISO 7779

Maschinenlärminformationsverordnung 3. GSGV, 18.01.1991: Der höchste Schalldruckpegel beträgt 70 dB (A) oder weniger gemäß ISO 7779.

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Energy Star®



As an ENERGY STAR Partner, we have determined that this product meets the ENERGY STAR guidelines for energy efficiency.

The basic objective of the ENERGY STAR Program is to reduce environmental pollution by encouraging the manufacture and sale of equipment that uses energy more efficiently.

This printer is equipped with a sleep timer function that conforms with the standards of the ENERGY STAR Program. This function makes it possible to reduce the amount of electrical power consumed by the printer. For maximum power savings, turn off the printer's power supply when not using the printer for extended periods of time.

For details on the sleep timer function and printer power consumption, refer to this manual.

Initial settings of the sleep timer function and power saved using the sleep timer function:

	CLP 3416
Initial Auto Sleep Setting	15 minutes (60 minutes)
Power consumption in Auto Sleep	16W (45W) [for Europe, Asia, and other countries]

(): ENERGY STAR program guideline

Group for Energy Efficient Appliances (GEEA)



The goal of GEEA is efficient use of energy. This product has a high-efficiency profile and meets the criteria for receiving the GEEA-Label.

	CLP 3416
Initial Auto Sleep Setting	15 minutes (30 minutes)
Power Consumption - Power off - Auto Sleep	0W (1W) 16W (30W)

(): GEEA criteria

Installation Precautions

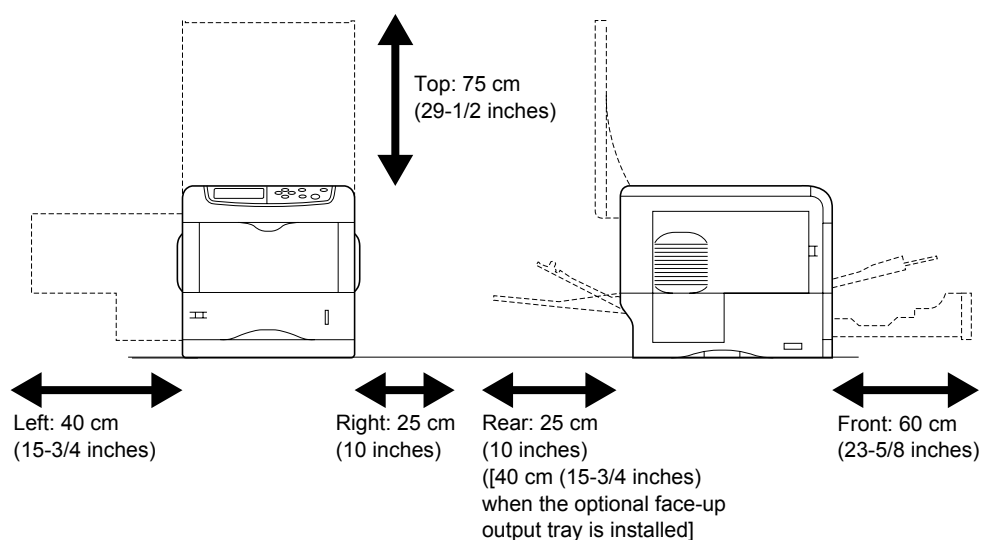
Environment

CAUTION: Avoid placing the printer on or in locations which are unstable or not level. Such locations may cause the printer to fall. This type of situation presents a danger of personal injury or damage to the printer.

Avoid locations with humidity or dust and dirt. If dust or dirt becomes attached to the power plug, clean the plug to avoid the danger of fire or electrical shock.

Avoid locations near radiators, heaters, or other heat sources, or locations near flammable items, to avoid the danger of fire.

To keep the printer cool and facilitate changing of parts and maintenance, allow access space as shown below. Leave adequate space, especially around the side cover, to allow air to be properly ventilated from the printer.



Other Precautions

- Adverse environmental conditions may affect the safe operation and performance of the printer. Install in an air-conditioned room (recommended room temperature: around 23 °C, humidity: around 60% RH) and avoid the following locations when selecting a site for the printer.
 - Avoid locations near a window or with exposure to direct sunlight.
 - Avoid locations with vibrations.
 - Avoid locations with drastic temperature fluctuations.
 - Avoid locations with direct exposure to hot or cold air.
 - Avoid poorly ventilated locations.
- If the flooring is of a soft material, it may be damaged by the casters when this product is moved after installation.

Power Supply/Grounding the Printer

WARNING: Do not use a power supply with a voltage other than that specified. Avoid multiple connections in the same outlet. These types of situations present a danger of fire or electrical shock.

Plug the power cord securely into the outlet. If metallic objects come in contact with the prongs on the plug, it may cause a fire or electric shock.

Always connect the printer to an outlet with a ground connection to avoid the danger of fire or electrical shock in case of an electric short. If an earth connection is not possible, contact your service representative.

Other Precautions

Connect the power plug to the closest outlet possible to the printer.

Handling of Plastic Bags

WARNING: Keep the plastic bags that are used with the printer away from children. The plastic may cling to their nose and mouth causing suffocation.

Precautions for Use

Cautions when Using the Printer

- **Do not** place metallic objects or containers with water (flower vases, flower pots, cups, etc.) on or near the printer. This type of situation presents a danger of fire or electrical shock should they fall inside.
- **Do not** remove any of the covers from the printer as there is a danger of electrical shock from high voltage parts inside the printer.
- **Do not** damage, break or attempt to repair the power cord. Do not place heavy objects on the cord, pull it, bend it unnecessarily or cause any other type of damage. These types of situations present a danger of fire or electrical shock.
- **Never** attempt to repair or disassemble the printer or its parts as there is a danger of fire, electrical shock or damage to the laser. If the laser beam escapes, there is a danger of it causing blindness.
- If the printer becomes excessively hot, smoke appears from the printer, there is an odd smell, or any other abnormal situation occurs, there is a danger of fire or electrical shock. Turn the power switch OFF (○) immediately, remove the power plug from the outlet and contact your service representative.
- If anything harmful (paper clips, water, other fluids, etc.) falls into the printer, turn the power switch OFF (○) immediately. Next, remove the power plug from the outlet to avoid the danger of fire or electrical shock. Then contact your service representative.
- **Do not** remove or connect the power plug with wet hands, as there is a danger of electrical shock.
- **Always** contact your service representative for maintenance or repair of internal parts.
- **Do not** pull the power cord when removing it from the outlet. If the power cord is pulled, the wires may become broken and there is a danger of fire or electrical shock. (Always grasp the power plug when removing the power cord from the outlet.)
- **Always** remove the power plug from the outlet when moving the printer. If the power cord is damaged, there is a danger of fire or electrical shock.
- If the printer will not be used for a short period of time (overnight, etc.), turn the power switch OFF (○). If it will not be used for an extended period of time (vacations, etc.), remove the power plug from the outlet for safety purposes during the time the printer is not in use.
- For safety purposes. **Always** remove the power plug from the outlet when performing cleaning operations.
- If dust accumulates within the printer, there is a danger of fire or other trouble. It is therefore recommended that you consult with your service representative in regard to cleaning of internal parts. This is particularly effective if accomplished prior to seasons of high humidity. Consult with your service representative in regard to the cost of cleaning the internal parts of the printer.

Other Precautions

- **Do not** place heavy objects on the printer or cause other damage to the printer.
- **Do not** open the top/left/rear cover, turn off the main switch, or pull out the power plug during printing.
- During printing, some ozone is released, but the amount does not cause any ill effect to one's health. If, however, the printer is used over a long period of time in a poorly ventilated room or when printing an extremely large number of copies, the smell may become unpleasant. To maintain the appropriate environment for print work, it is suggested that the room be properly ventilated.
- **Do not** touch electrical parts, such as connectors or printed circuit boards. They could be damaged by static electricity.
- **Do not** attempt to perform any operations not explained in this handbook.
- If the printer will not be used for an extended period of time, remove the paper from the cassette, return it to its original package and reseal it.

CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Cautions for Toner Handling

- **Do not** incinerate toner and toner containers. Dangerous sparks may cause burn.
- **Never** open the toner container.
- **Do not** inhale the toner.
- If you get toner on your hands, **Do not** rub your eyes or touch your mouth. Wash the toner from your hands.
- For the disposal of old toner container, consult your service technician. Or dispose of the toner or toner containers in accordance with Federal, State and Local rules and regulations.
- Retain the empty toner container for use as a toner collector.

For More Information...

Item	Description
Installation Guide (paper manual)	Describes the printer setup procedure.
Basic Operation Guide (this manual)	Guides you through topics concerning the operations and maintenance of the printer.
The following documents are stored in the CD-ROM as PDF documents.	
Advanced Operation Guide	Guides you through topics concerning loading paper, using the operator panel as well as describing the options available and the specifications for the physical interface.
KX Printer Drivers Operation Guide	Describes how to install and set the printer driver.
Technical Reference for PRESCRIBE Commands	PRESCRIBE is the native language of the Kyocera printers. This Technical Reference contains the information about how the printing is performed using the PRESCRIBE commands as well as the font and emulation description. Also included is a list of permanent parameters and their explanation needed when customizing your printer.
Command Reference for PRESCRIBE Commands	Gives a detailed explanation of the PRESCRIBE command syntax and parameters with the aid of print examples.

About the Operation Guide

This Operation Guide has the following chapters:

Chapter 1 - Installation

This chapter describes how to install the printer.

Chapter 2 - Machine Parts

This chapter explains the names of parts.

Chapter 3 - Printing Operation

This chapter explains how to print from your workstation.

Chapter 4 - Maintenance

This chapter explains how to replace the toner container and how to care for your printer.

Chapter 5 - Troubleshooting

This chapter explains how to handle printer problems that may occur, such as paper jams.

Chapter 6 - Specifications

This chapter lists the printer's specifications.

Conventions

This manual uses the following conventions.

Convention	Description	Example
Italic Typeface	Used to emphasise a key word, phrase or message. In addition, references to other publications are displayed in italic typeface.	A <i>Completed</i> message displays and the <i>Copy Basic</i> screen returns.
Notes	Used to provide additional or useful information about a function or feature. Can also contain references to other publications.	NOTE: For information about storing the pin, refer to step 10.
Important	Use to provide important information.	IMPORTANT: Ensure paper is not folded, curled, or damaged.
Caution	Cautions are statements that suggest <i>mechanical</i> damage as a result of an action.	CAUTION: Do not pull the cassette out when holding the front of the machine.
Warning	Used to alert users to the possibility of <i>personal</i> injury.	WARNING: High voltage is present in the charger section.

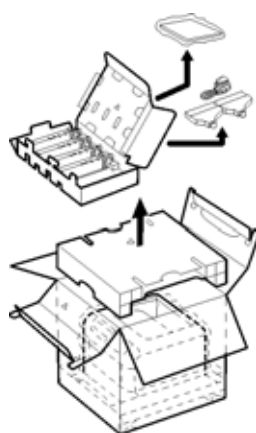
1 Installation

This chapter contains explanations on the following topics:

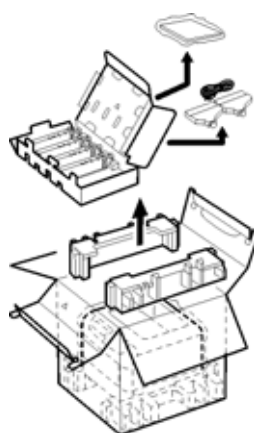
- Unpacking the printer 1-2
- Installing the Toner Container and Waste Toner Box ... 1-4
- Making the connections..... 1-7

Unpacking the printer

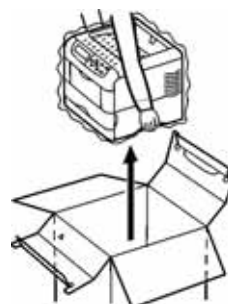
- 1 Unpack the printer and all its included components.



European/Pacific
countries



U.S.A./Canada

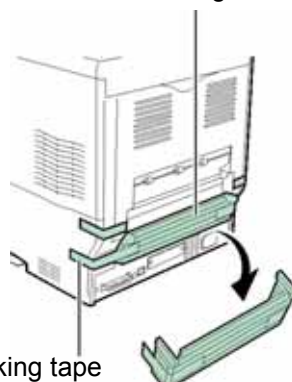


Be sure to hold the right and left sides of the printer when carrying it, as shown in the illustration.



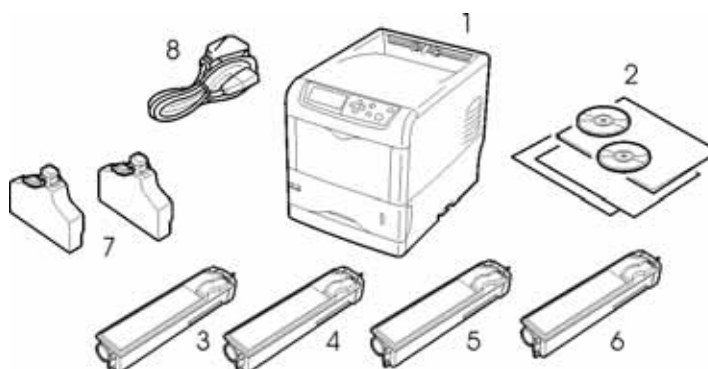
- 2 Remove the packing cover and all packing tapes.

Packing cover



Packing tape

3 Check the parts and components.



- 1 Printer
- 2 Documents and software
 - Installation Guide
 - Basic Operation Guide (this guide)
 - CD-ROMs
- 3 Magenta toner container
- 4 Cyan toner container
- 5 Yellow toner container
- 6 Black toner container
- 7 Waste toner boxes (one is a spare)
- 8 Power cord

4 Install the toner container and waste toner box (see *Installing the Toner Container and Waste Toner Box* on page 1-4).

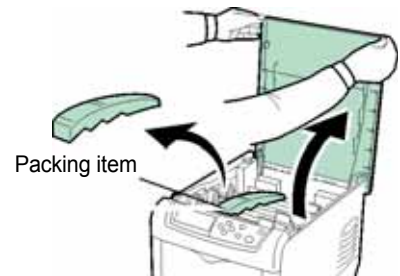
Installing the Toner Container and Waste Toner Box

- 1 Close the paper transfer unit tightly.



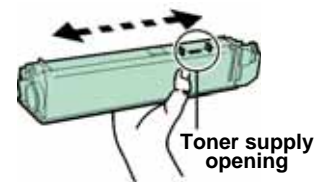
- 2 Open the top cover and remove the packing item.

In this example, it is assumed that you are installing the black toner container.



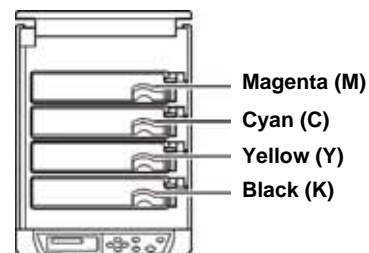
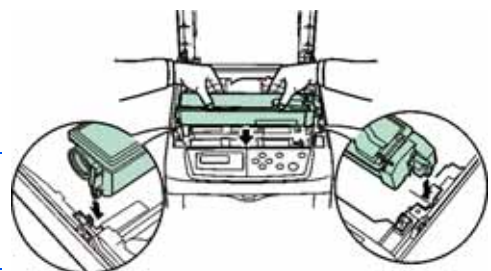
- 3 Make sure that the side of the toner container with the markings (caution notes, etc.) are facing downward, and shake the new toner container 5 or 6 times as shown in the figure in order to distribute the toner evenly inside the container.

Do not forcefully push in on the center of the toner container or touch the toner supply opening with your hands or fingers during this procedure.

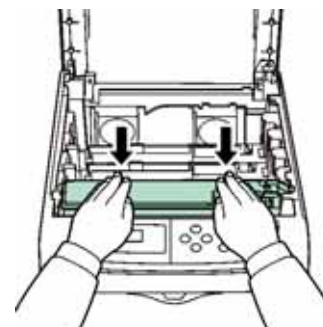


- 4 Set the new toner container in the printer with the markings facing upward as shown in the figure below.

NOTE: Be sure to set the toner container in the correct location for that color.

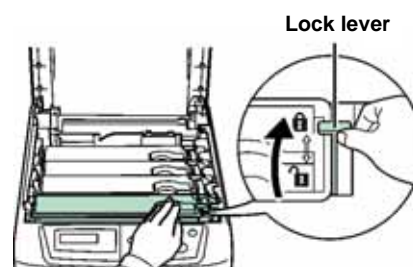


- 5** Install the toner container by pushing down on the container until it clicks firmly into place.

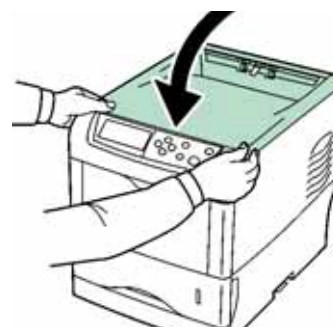


- 6** Apply light pressure to the toner container and push the blue lock lever on the toner container back towards the locked symbol as far as it will go.

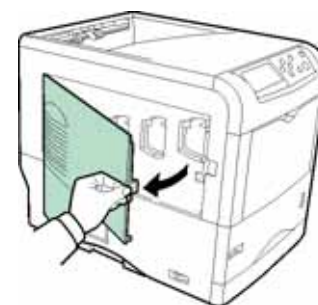
To install the other color toner containers, use the same procedure as above.



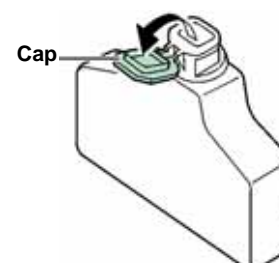
- 7** Close the top cover.



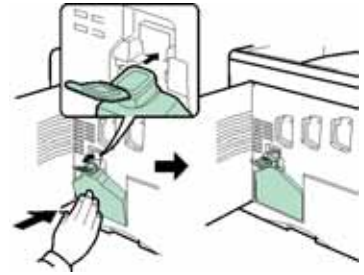
- 8** Open the left cover.



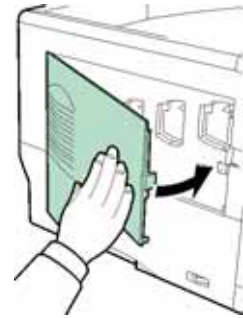
- 9** Open the cap of the waste toner box.



- 10** Install the waste toner box into the printer as shown in the figure by setting the bottom of the box into the receptacle, and then pushing down on the box until it snaps firmly into place.



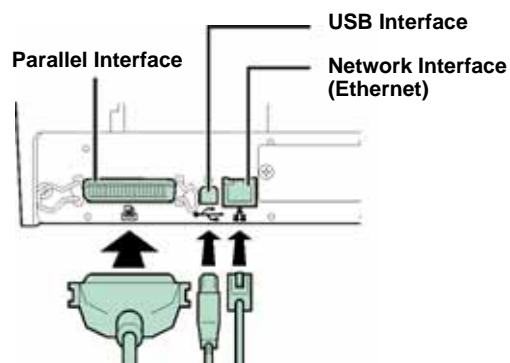
- 11** Make sure that the waste toner box is correctly inserted and close the left cover.



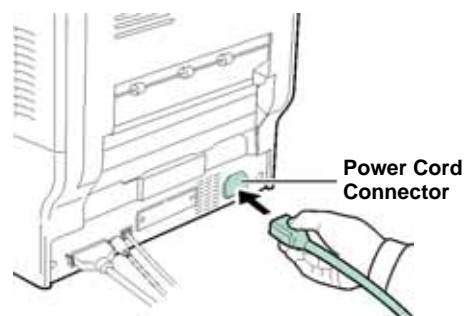
- 12** Connect up the printer (see *Making the connections on page 1-7*).

Making the connections

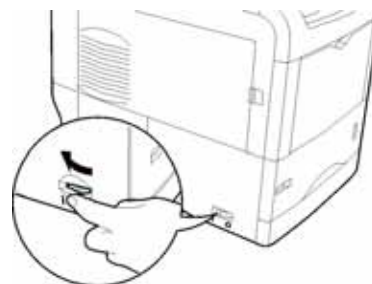
- 1 Connect the printer to your computer. (The connecting cable is sold separately.)



- 2 Connect the provided power cord to a power outlet.



- 3 Turn on (|) the printer's power switch (located on the left side of the printer).



- 4 Set the color registration.

NOTE: Set the color registration according to the procedures described in the *Advanced Operation Guide*, *Using the Operator Panel* section under *Other Modes*.

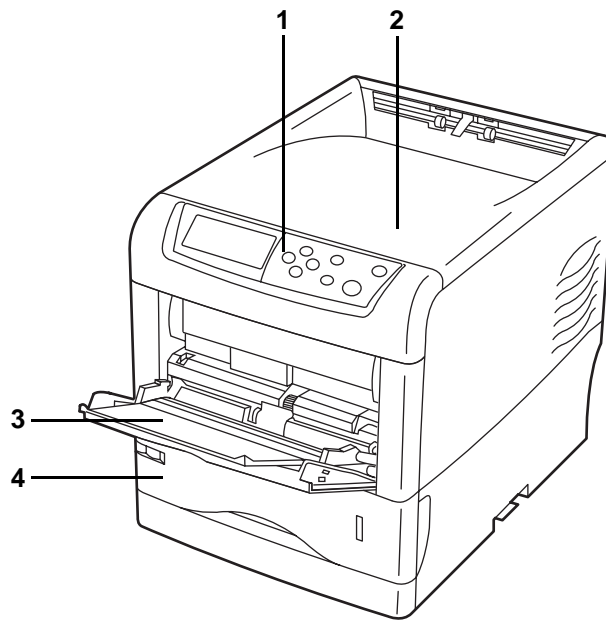
2 Machine Parts

This section provides explanations and illustrations for you to determine the parts and their functions. Try to be familiar with the names and functions of these parts for correct use and optimal performance.

This chapter contains explanations on the following topics:

- Components at the Front of the Printer 2-2
- Components at the Left of the Printer 2-3
- Internal Components 2-4
- Components at the Rear of the Printer..... 2-5

Components at the Front of the Printer



1 Operator Panel

Used to specify printer functions and display the printer operating status.

2 Top Cover

When open, this cover gives you access to the internal component for replacing toner containers.

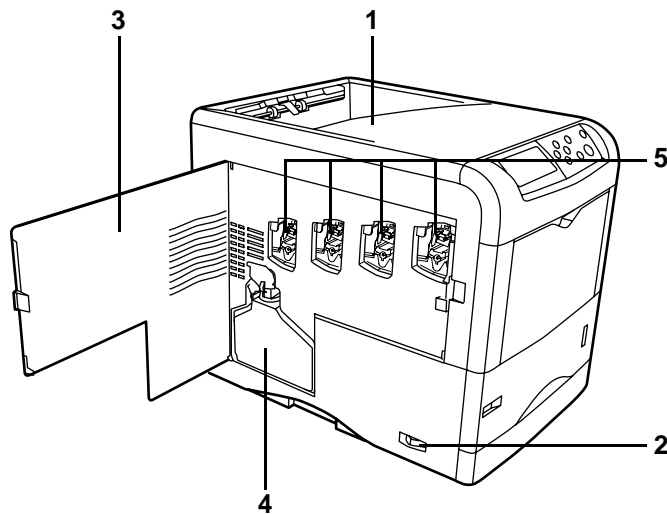
3 MP (Multi-Purpose) Tray

The MP tray holds up to 100 sheets of paper (80 g/m²).
Transparencies, envelopes, etc. must be fed using this tray.

4 Paper Cassette

The cassette holds up to 500 sheets of paper from A5 to Legal sizes (80 g/m²).

Components at the Left of the Printer



1 Top Tray

This tray receives printouts face down.

2 Power Switch

This switch turns printer power on and off.

3 Left Cover

This cover needs to be opened when replacing the waste toner box or cleaning the main charger units.

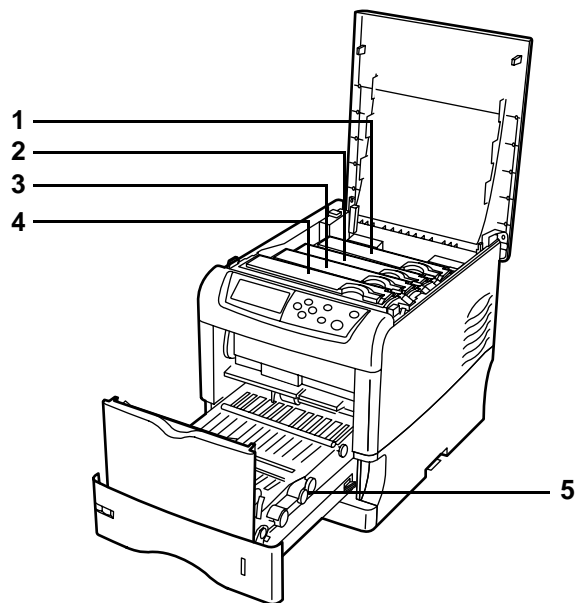
4 Waste Toner Box

This plastic box collects waste toner for later disposal. The box has a cap which is used to seal the box opening when being disposed of.

5 Main Charger Units on the Drum Units

The main charger units are electrical components included in each toner container and are used to transfer toner onto the drum unit. Whenever you replace a toner container, be sure to clean the corresponding main charger unit.

Internal Components



1 Magenta Toner Container

This container holds magenta (M) toner. You must replace the container when the toner runs out.

2 Cyan Toner Container

This container holds cyan (C) toner. You must replace the container when the toner runs out.

3 Yellow Toner Container

This container holds yellow (Y) toner. You must replace the container when the toner runs out.

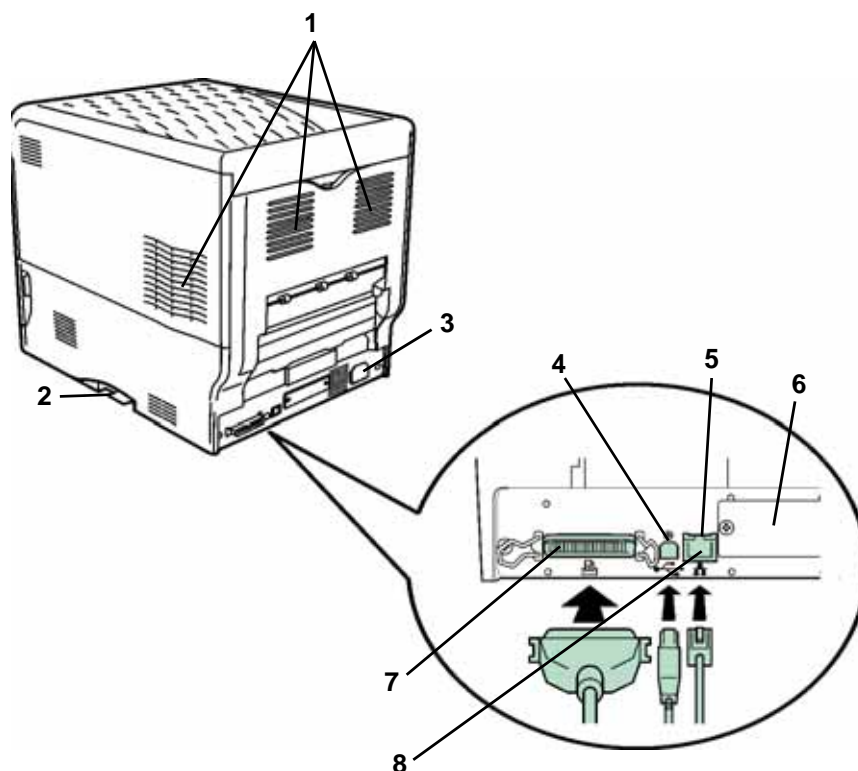
4 Black Toner Container

This container holds black (K) toner. You must replace the container when the toner runs out.

5 Paper Transfer Unit

The paper transfer unit feeds paper from the cassette for printing.

Components at the Rear of the Printer



1 Vents

Air is purged through these vents to cool down the inside.

2 Memory Card Slot

This slot receives a memory card. A memory card can hold fonts, macros, forms, etc., that can be downloaded in the printer's memory. For details, see the *Options* section of the *Advanced Operation Guide*.

3 Power Cord Connector

This connector accepts the power cord supplied with the printer.

4 USB Interface Connector

This connector is a USB interface that conforms to the Hi-Speed USB. Use a USB cable between this connector and the USB port on a computer.

5 Network indicators

These indicators light according to the communication status with the network.

Right: 10BASE-T/100BASE-TX indicator

Lights when you are connected to the network at 10 Mbps or 100 Mbps.

Left: Status indicator

Flashes during data communication.

6 Option Interface Slot (Network/Serial)

This slot can be used to hold the optional network interface card, a hard disk or the serial interface board kit. For details, see the *Options* section of the *Advanced Operation Guide*.

7 Parallel Interface Connector

This connector is for a standard Centronics parallel interface cable from the computer. Connect this connector to the computer's parallel port.

8 Network Interface Connector

Connects to the network via a 10BASE-T/100BASE-TX network cable.

3 Printing Operation

This chapter contains explanations on the following topics:

- Loading Printer Driver 3-2
- Printing from Application Software 3-3

Loading Printer Driver

Ensure the printer is plugged in and connected to the PC before installing the printer driver from the CD-ROM.

- 1 Switch on the PC and activate Windows.

NOTE: If the Welcome to the Found New Hardware Wizard dialog box displays, select Cancel.

- 2 Insert the CD-ROM supplied with the printer into the optical drive of the PC.

- 3 The installation program launches.

NOTE: If the installation program fails to launch, use Windows Explorer to access the CD-ROM and select Setup.exe.

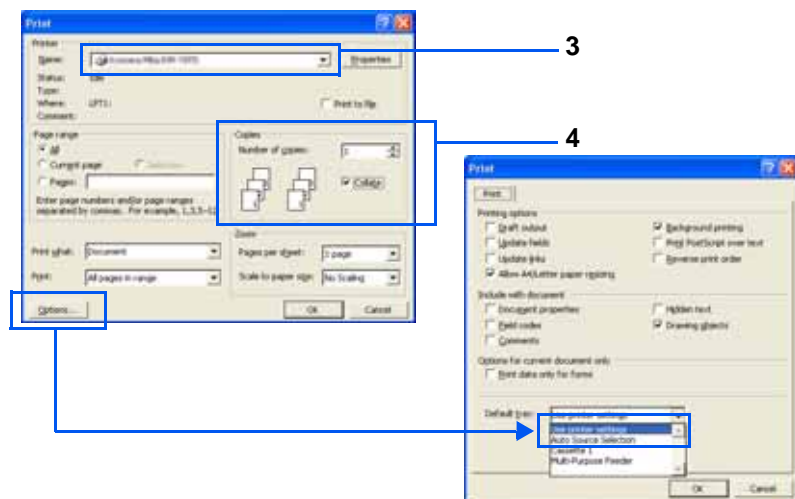
- 4 Perform the procedures displayed on the installation program to install the KX DRIVER.

Printing from Application Software

The steps required to print a document created with an application are explained below. You can select the printing *Paper Size* and *Output Destination*.

- 1 Load the paper required into the paper cassette.
- 2 From the application *File* menu, select **Print**. The *Print* dialog box displays.
- 3 Click the drop down list of printer names. All the printers installed in Windows are listed. Click the name of the machine.
- 4 Use **Number of copies** to enter the number of prints required. Up to 999 copies can be entered.

For Microsoft Word, we recommend that you click **Options** and specify **Use printer settings** for the **Default tray**.



- 5 To start printing, click **OK**.

NOTE: For information on how to use the printer driver software, refer to the *KX Printer Driver Operation Guide*.

4 Maintenance

This chapter contains explanations on the following topics:

- General Information..... 4-2
- Toner Container Replacement..... 4-3
- Cleaning the Printer..... 4-8
- Replacing the Waste Toner Box 4-15

General Information

This chapter describes basic maintenance tasks you can perform on the printer. You can replace the following component according to the printer's display:

- Toner Kits
- Waste Toner Box

Also, the following parts need periodic cleaning:

- Paper Transfer Unit
- Main Charger Units
- Advanced Beam Array Lenses

Toner Container Replacement

Frequency of toner container replacement

The life of the toner containers depends on the amount of toner required to accomplish your printing jobs. When 5% coverage (a typical business document) of individual toner colors is assumed for A4 or letter size paper:

- The black toner container lasts an average of 8,000 monochrome pages.
- The cyan, magenta, and yellow toner containers last an average of 8,000 color images.

You can print a status page to check how much toner remains in the toner container. For details, see *Using the Operator Panel* in the *Advanced Operation Guide*. The Toner Gauge section on the status page shows a progress bar for each color, which roughly represents how much toner is left in the toner container.

Starter Toner Containers

The toner containers packed with the new printer are starter toner containers. The black starter toner container lasts an average of 4,000 monochrome pages. The cyan, magenta, and yellow starter toner containers last an average of 4,000 color images for each.

Toner Kits

It is strongly recommended that you use the new toner kit supplied from the manufacturer to prevent printer troubles and ensure a long printer life.

The toner kits are supplied in 4 different colors: cyan, magenta, yellow and black.

A new toner kit for each color contains the following items:

- Toner Container
- Cleaning cloth
- Grid cleaner for main charger cleaning
- Plastic waste bags for old toner container and old waste toner box
- Waste toner box
- Installation Guide

NOTE: Do not remove the toner container from the carton until you are ready to install it in the printer.

Understanding Messages Requesting Toner Container Replacement

The printer displays messages for individual colors at two stages of toner usage. This message is automatically alternated with the other printer message (such as *Ready*):

- When the printer becomes low on toner, for example in the cyan container, the printer displays the message *Toner low C, M, Y, K* as the first caution. Note the replacement is not always necessary at this stage.
- If you ignore the above message and continue printing, the printer displays the message *Replace toner* — just before the toner is used up. The toner container must be replaced immediately. Clean the separate charger wires, etc. After the cleaning is finished, however, the message does not automatically change to *Ready*. To restart printing, you must press **[GO]** and make the printer ready.

In either case, replace the toner container, see *Toner Container Replacement* on page 4-3.

Replacing the Toner Container

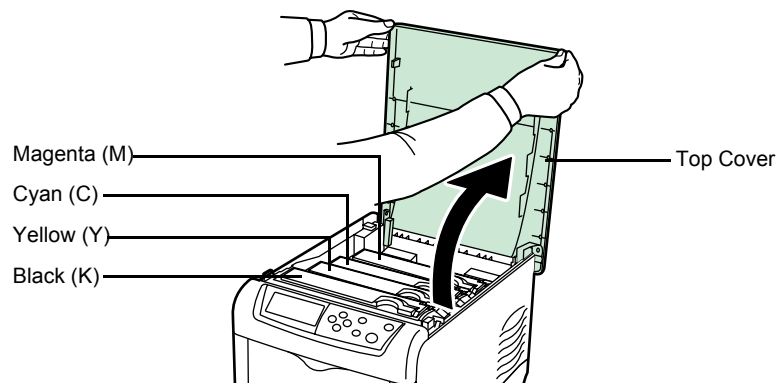
NOTE: During toner container replacement, temporarily put storage media and computer supplies (such as floppy disks) away from around the toner container. This is to avoid damaging media by the magnetism of toner.

This section explains how to replace the toner containers. When replacing the toner container of any color, always replace the waste toner box at the same time. If this box is full, the printer may be damaged or contaminated by the waste toner that may spill over the box.

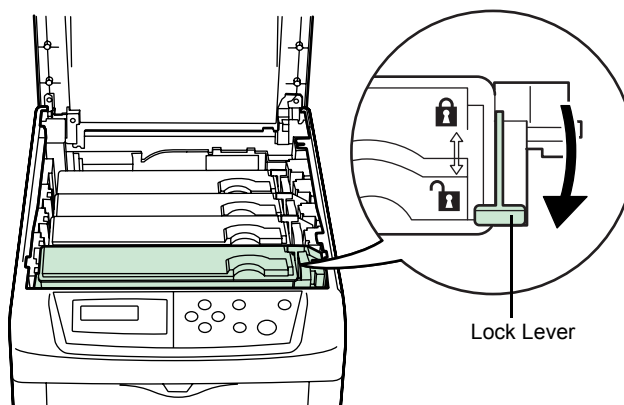
NOTE: You do not have to turn printer power off before starting the replacement. Any data that may be under printing process in the printer will be deleted if you turn printer power off.

To replace the toner container, first make sure of the color of the toner container requiring replacement. In this example, it is assumed that you are replacing the black toner container.

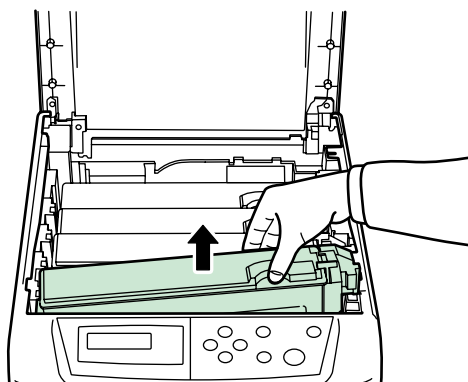
- 1 Open the top cover.



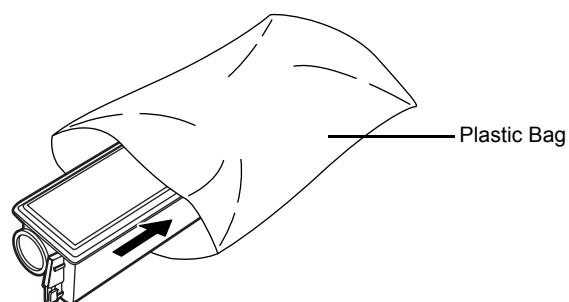
- 2** Pull the blue lock lever on the toner container forward towards the unlocked symbol.



- 3** Carefully remove the old toner container from the printer.

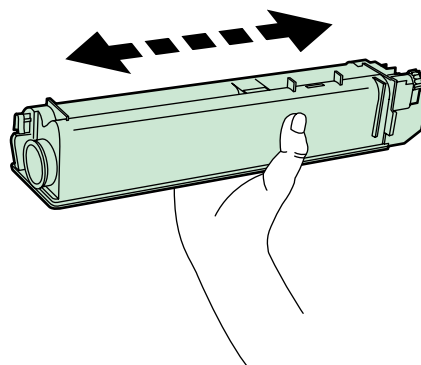


- 4** Put the old toner container in the plastic bag (contained in the toner kit) and discard it later according to the local code or regulations for waste disposal.

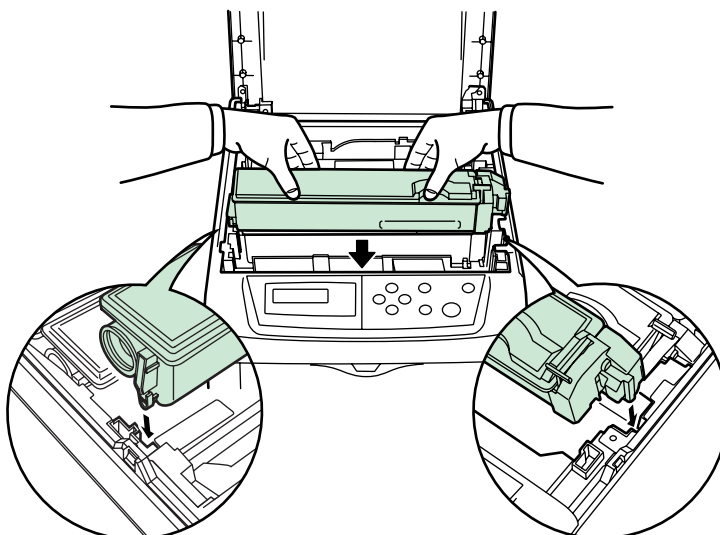


- 5** Take the new toner container out of the toner kit.

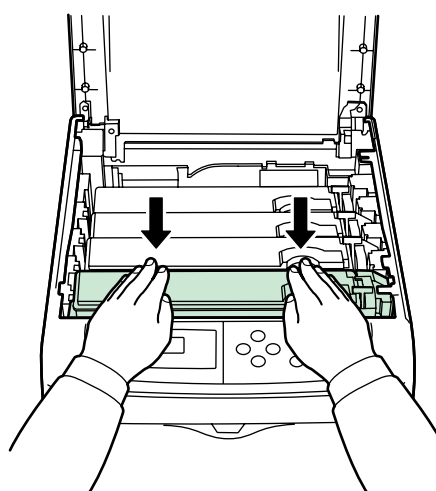
- 6** Shake the new toner container 5 or 6 times as shown in the figure in order to distribute the toner evenly inside the container.



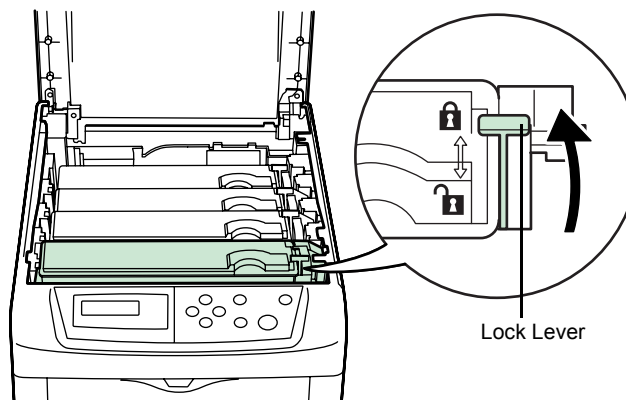
- 7** Set the new toner container in the printer as shown in the figure below.



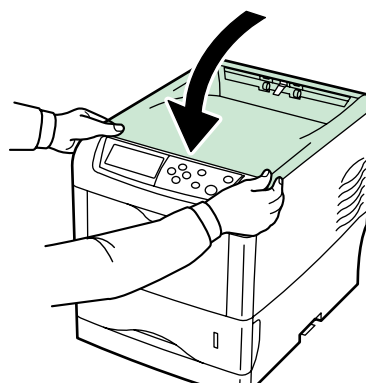
- 8** Push down on the top of the toner container to install it firmly in place.



- 9** Pull the blue lock lever on the toner container back towards the locked symbol as far as it will go.



- 10** Use the same procedure to replace the other color toner containers.
- 11** Close the top cover.



Proceed to the next section.

Cleaning the Printer

The following parts must be cleaned each time the toner container and waste toner box are replaced:

- Main charger wire
- Main charger grid
- Advanced beam array lens
- Registration roller

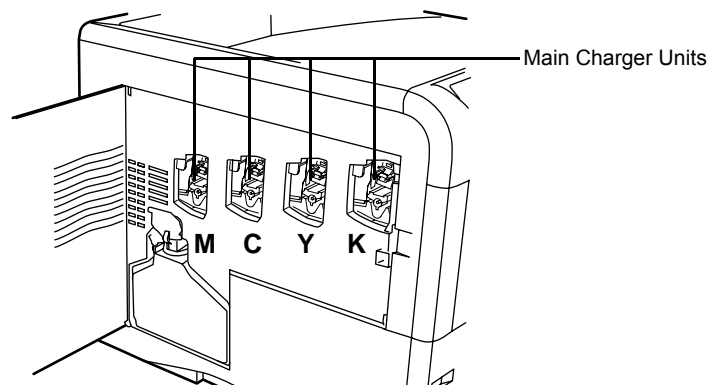
In addition to this, it is recommended that the main charger wire and registration roller are cleaned periodically at least once a month.

If lines, etc., appear on printed copies, the printouts appear dirty, or faint or blurred printouts are produced, clean the advanced beam array lenses.

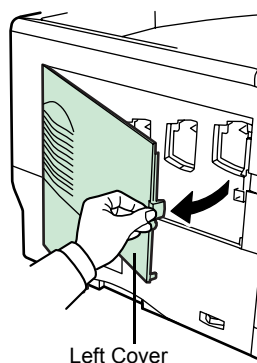
Cleaning the Main Charger Unit

The main charger units need to be cleaned periodically as they get contaminated after long usage. Each main charger unit comprises two main parts — the wire and the grid — which should be cleaned separately as explained below.

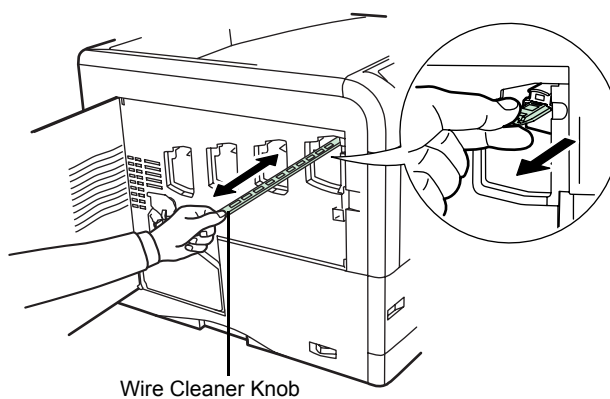
There are 4 main charger units, one for each toner container. When performing the cleaning procedure, be sure to clean the main charger unit that corresponds to color of the toner container that was replaced. The following example explains the procedure to clean the main charger unit for the black toner container.



- 1 Open the left cover.

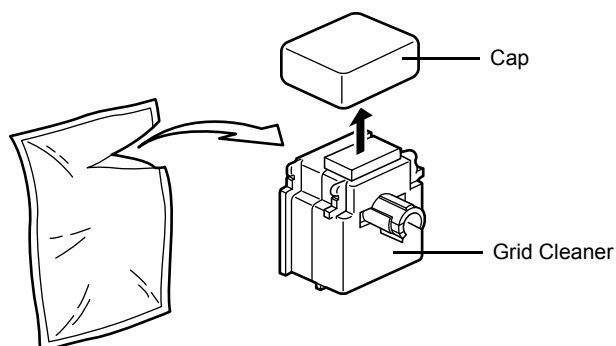


- 2 First clean the main charger wire. Grasp the green wire cleaner knob. Gently pull the wire cleaner knob out and push it back in. Repeat this 2 to 3 times. After cleaning, make sure you restore the wire cleaner knob to its home position.



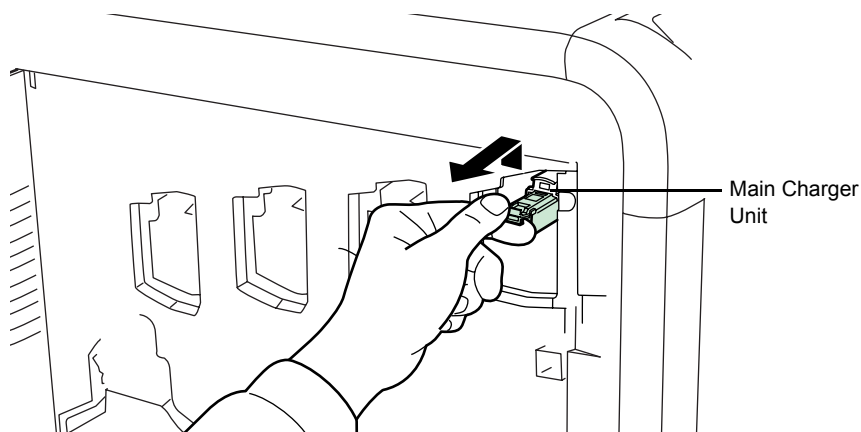
NOTE: If the wire cleaner knob is not restored to its home position, a band will print along the length of the page.

- 3 Next, clean the main charger grid. Take the grid cleaner out of the toner kit. Take the grid cleaner out of the protective bag and remove the cap.

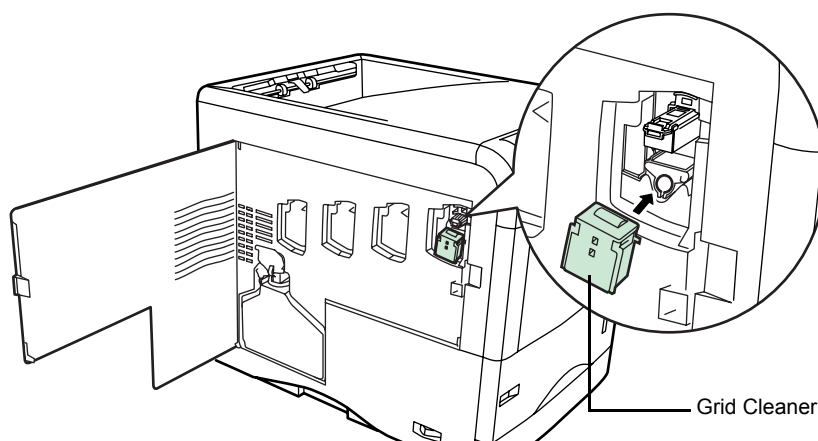


NOTE: The pad of the grid cleaner contains water. Clean the grid quickly so that the pad may not dry off.

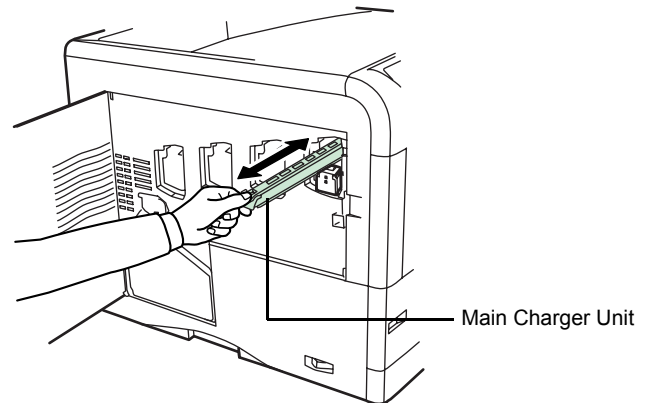
- 4** Lift up slightly on the main charger unit and pull it out a short distance as shown in the figure below.



- 5** Attach the grid cleaner to the printer with the pad facing up.

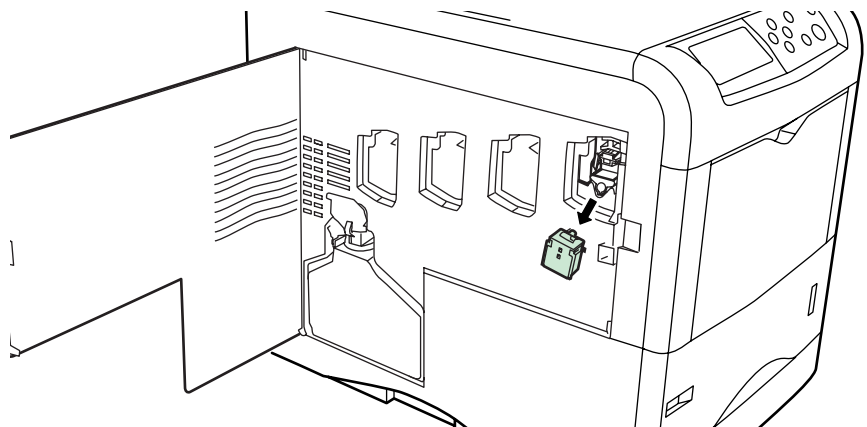


- 6** Gently pull the main charger handle out and push it back in. Repeat this 2 to 3 times. These movements clean the grid. After cleaning, make sure you restore the main charger unit to its home position.



NOTE: If the main charger unit is not restored to its home position, the corresponding color will be printed over the whole page.

- 7** Remove the grid cleaner from the printer and discard it. The grid cleaner cannot be reused.



Use the same procedure to clean the main charger units for the other toner containers.

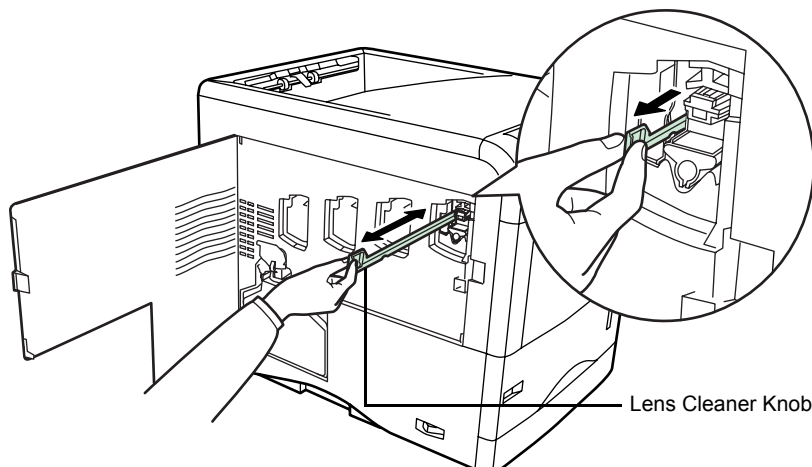
Proceed to the next section and clean the advanced beam array lenses.

Cleaning the Advanced Beam Array Lenses

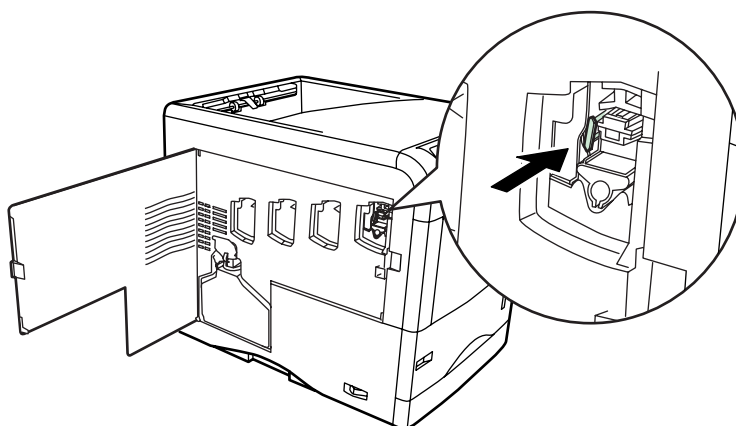
If lines, etc., appear on printed copies, the printouts appear dirty, or faint or blurred printouts are produced, clean the advanced beam array lenses.

There is 1 lens on the main charger unit of each toner container. The following example explains the procedure to clean the lens on the main charger unit of the black toner container.

- 1 Grasp the tab of the green lens cleaner knob. Gently pull the lens cleaner knob out and push it back in. Repeat this 2 times.



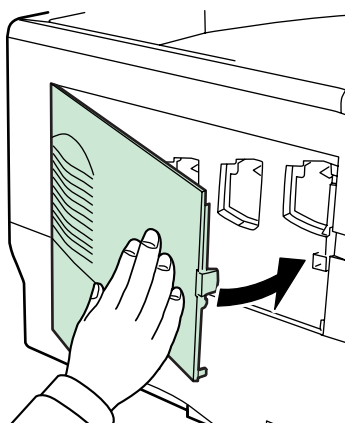
- 2 Push the lens cleaner knob back in completely. After cleaning, make sure you restore the lens cleaner knob to its home position.



NOTE: If the lens cleaner knob is not restored to its home position, the corresponding color will be printed over the whole page.

Use the same procedure to clean the lenses on the main charger unit of the other toner containers.

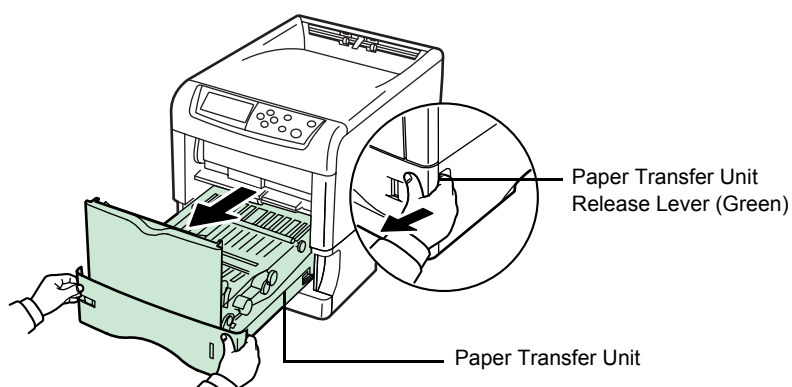
- 3 Once you are finished cleaning all 4 lenses, close the left cover.



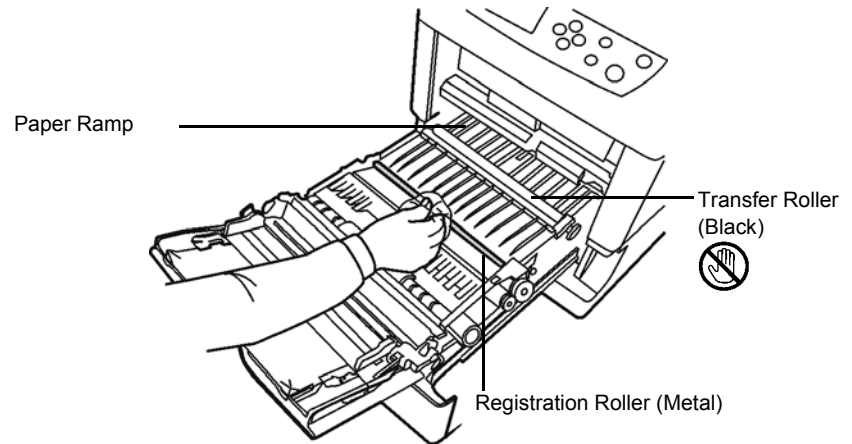
Cleaning the Paper Transfer Unit

Print problems such as soiling of the reverse side of printed pages may occur if the paper transfer unit becomes dirty. To clean the paper transfer unit, you must use the cleaning cloth included in the toner kit.

- 1 While pulling the green paper transfer unit release lever, pull out the paper transfer unit.



- 2 Wipe away the paper dust on the registration roller and the paper ramp using the wiper cloth included in the toner kit.



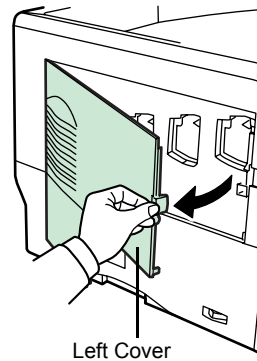
NOTE: Be careful not to touch the black transfer roller during cleaning as this may adversely affect print quality.

- 3 Push the paper transfer unit back in completely.

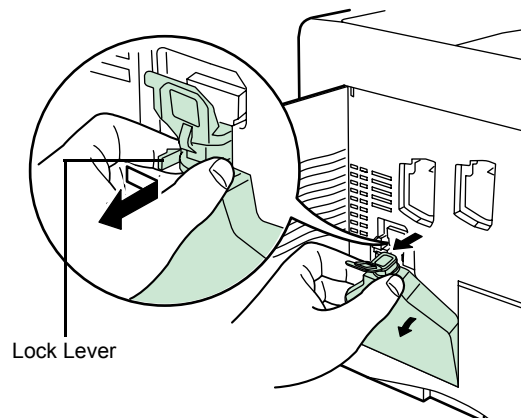
Replacing the Waste Toner Box

Replace the waste toner box when the `Check waste toner box` message is displayed. A new waste toner box is included with the toner kit. The printer will not operate without replacing the waste toner box.

- 1 Open the left cover.

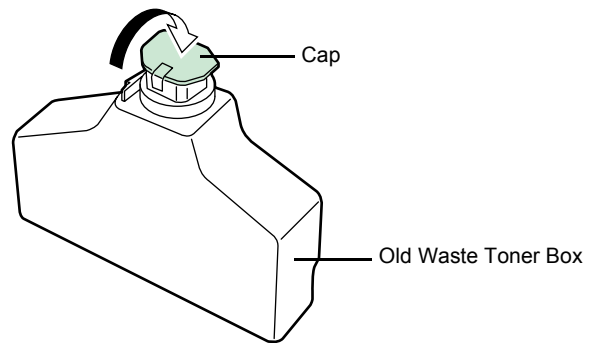


- 2 While holding the waste toner box, press the lock lever and then gently remove the waste toner box.

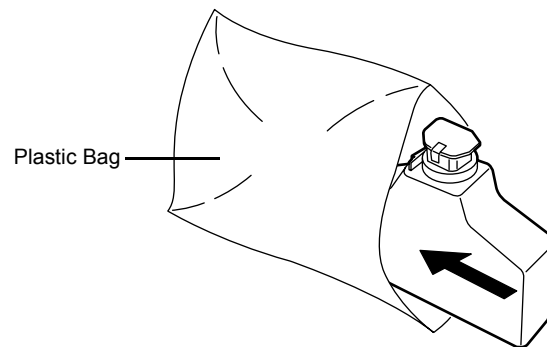


NOTE: Remove the waste toner box as gently as possible so as not to scatter the toner inside. Do not let the opening of the waste toner box face downward.

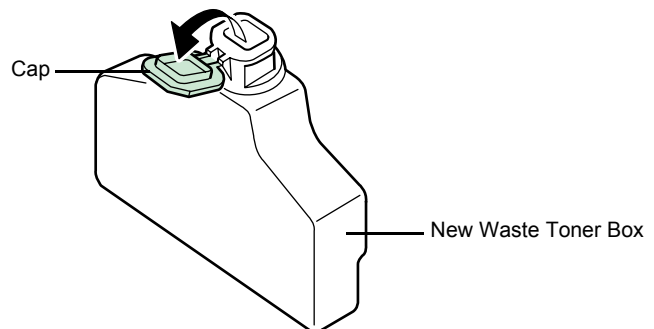
- 3** Close the cap to the old waste toner box after removing the box from the printer.



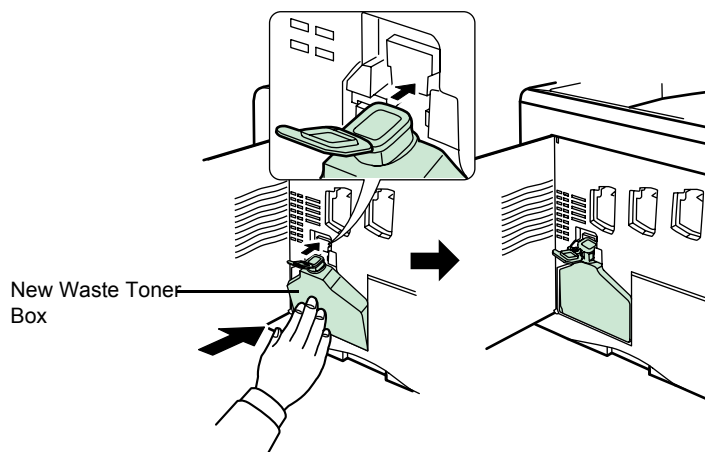
- 4** To prevent toner from spilling, put the old waste toner box in the plastic bag (contained in the toner kit) and discard it later according to the local code or regulations for waste disposal.



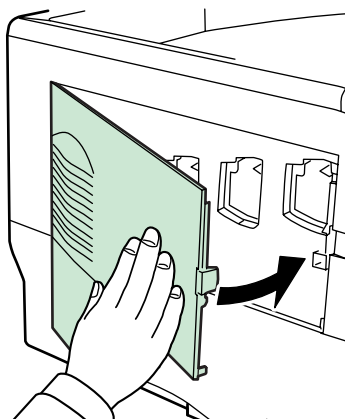
- 5** Open the cap of the new waste toner box.



- 6** Insert the new waste toner box as shown in the figure below. When the box is set correctly, it will snap into place.



- 7** Make sure that the waste toner box is correctly inserted and close the left cover.



After replacing the toner containers and the waste toner box, clean the main charger units and the paper transfer unit. For instructions, see *Cleaning the Printer* on page 4-8.

5 Troubleshooting

This chapter contains explanations on the following topics:

- General Guidelines..... 5-2
- Print Quality Problems..... 5-3
- Error Messages 5-7
- Clearing Paper Jams..... 5-14

If a problem cannot be corrected, contact your service technician.

General Guidelines

The table below provides basic solutions for problems you may encounter with the printer. We suggest you consult this table to troubleshoot the problems before calling for service.

Symptom	Check Items	Corrective Action
Print quality is not good.	See <i>Print Quality Problems</i> on page 5-3.	
Paper is jammed.	See <i>Clearing Paper Jams</i> on page 5-14	
Nothing lights on the operator panel even when power is turned on and the fan makes no noise.	Check that the power cord is properly plugged into the power outlet.	Turn off the printer's power, plug in the power cord securely, and try turning on the printer's power again.
	Check that the power switch is in the On (I) position.	Set the power switch to the On position.
The printer prints a status page, but does not print jobs from the computer.	Check the printer cable or the interface cable.	Connect both ends of the printer cable securely. Try replacing the printer cable or the interface cable.
	Check program files and application software.	Try printing another file or using another print command. If the problem occurs only with a specific file or application, check the printer driver settings for that application.

Tips

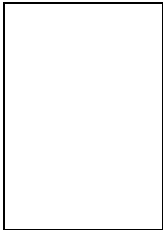
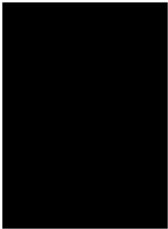
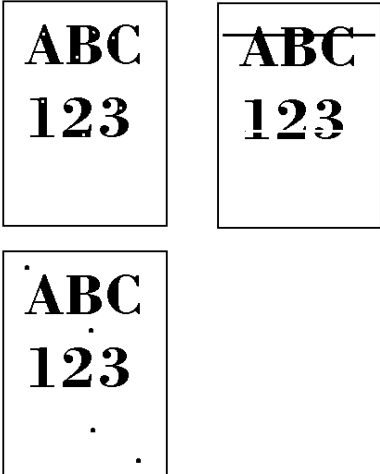
Printer problems may be solved easily by following the tips below. When you have encountered a problem that following the above guidelines will not solve, try the following:

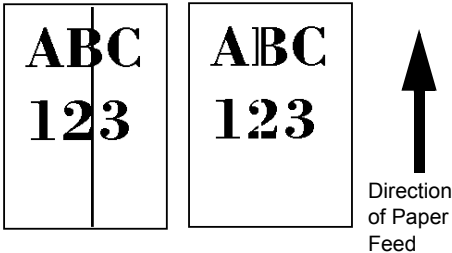
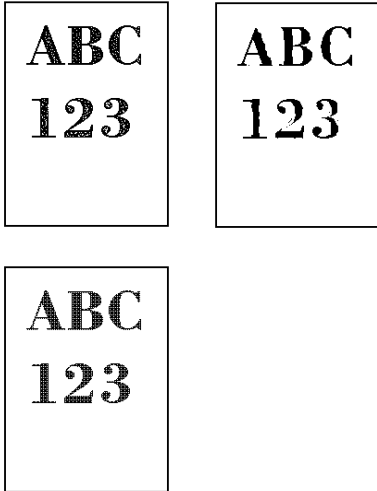
- Turn the printer power off and wait for several seconds. Then, turn on the printer.
- Reboot the computer which sends the print jobs to the printer.
- Obtain and use the latest version of the printer driver. The latest versions of printer drivers and utilities can be downloaded from the internet.
- Make sure that the procedures for printing are correctly followed in the application software. Consult the documentation supplied with the application software.
- If the printer prints garbage characters or stalls when the computer is turned on, particularly when the printer is connected to the computer under Windows 98 via the parallel port, rename device driver file drvppqt.vxd. This file may be located in Windows\System\losubsys or Arcada\System folder. For technical details, visit Microsoft web site for the device driver.

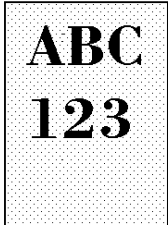
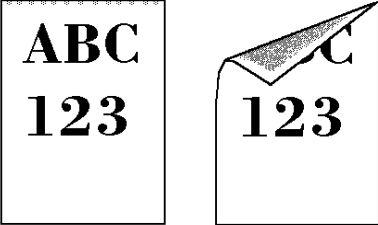
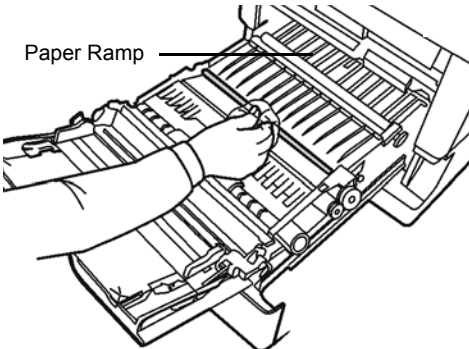
Print Quality Problems

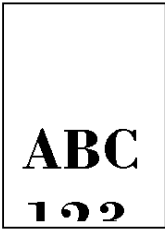
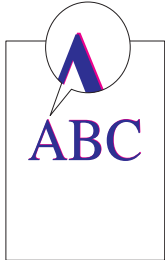
The tables and diagrams in the following sections define print quality problems and the corrective action you can conduct to solve the problems. Some solutions may require cleaning or replacing parts of the printer.

If the suggested corrective action will not solve the problem, call for service.

Printed Results	Corrective Action
Completely blank printout 	<p>Check the toner containers. Open the printer top cover and check that the toner containers are correctly installed in the printer. For more information on installing the toner containers, see <i>Toner Container Replacement</i> on page 4-3.</p> <p>Check that the application software is correctly operated.</p>
Full single-color printout 	<p>Check the charger unit. Open the left cover and check that the charger unit is correctly installed.</p>
Dropouts, horizontal streaks, stray dots 	<p>Clean the main charger units. Open the left cover. Slowly pull the green wire cleaner knob to each of the main charger units in and out a few times. For full details, see <i>Cleaning the Main Charger Unit</i> on page 4-8.</p>

Printed Results	Corrective Action
<p>Black or white vertical streaks</p> 	<p>Check the operator panel for toner. If the Toner low (C/M/Y/K) message is displayed with color description, install a new toner kit for the color. To replace the toner container, see <i>Toner Container Replacement on page 4-3</i>.</p> <p>Clean the main charger units. Open the left cover. Slowly pull the green wire cleaner knob to each of the main charger units in and out a few times. For full details, see <i>Cleaning the Main Charger Unit on page 4-8</i>.</p> <p>Clean the advanced beam array lenses. Open the left cover. Slowly pull the green lens cleaner knob in and out 2 times. For full details, see <i>Cleaning the Advanced Beam Array Lenses on page 4-11</i>.</p> <p>Refresh drum. Perform the following procedures on the operator panel and try cleaning the drum surface using the printer's built-in cleaning system.</p> <ol style="list-style-type: none"> 1 Press [MENU]. 2 Press Δ or ∇ repeatedly until >Others appears. 3 Press \triangleright. Press Δ or ∇ repeatedly until >Service appears. 4 Press \triangleright. Press Δ or ∇ repeatedly until >>Drum appears. 5 Press [ENTER] twice. 6 The message display shows Please wait. After approx. 3 minutes, the display returns to Ready.
<p>Faint or blurred printing</p> 	<p>Clean the main charger units. Open the left cover. Slowly pull the green wire cleaner knob to each of the main charger units in and out a few times. For full details, see <i>Cleaning the Main Charger Unit on page 4-8</i>.</p> <p>Clean the advanced beam array lenses. Open the left cover. Slowly pull the green lens cleaner knob in and out 2 times. For full details, see <i>Cleaning the Advanced Beam Array Lenses on page 4-11</i>.</p> <p>Make sure the paper type setting is correct the paper being used. See the <i>Using the Operator Panel</i> section in the <i>Advanced Operation Guide</i>.</p> <p>Conduct color calibration either by switching the printer off then on or using the printer operator panel. For full details, see the <i>Using the Operator Panel</i> section in the <i>Advanced Operation Guide</i>.</p> <p>Try adjusting the color control settings using the printer driver.</p> <p>Check the operator panel. If the Toner low (C/M/Y/K) message is displayed with color description, install a new toner kit for the color. To replace toner, see <i>Toner Container Replacement on page 4-3</i>.</p>

Printed Results	Corrective Action
	<p>Refresh drum. Perform the following procedures on the operator panel and try cleaning the drum surface using the printer's built-in cleaning system.</p> <ol style="list-style-type: none"> 1 Press [MENU]. 2 Press Δ or ∇ repeatedly until >Others appears. 3 Press \triangleright. Press Δ or ∇ repeatedly until >Service appears. 4 Press \triangleright. Press Δ or ∇ repeatedly until >>Drum appears. 5 Press [ENTER] twice. 6 The message display shows Please wait. After approx. 3 minutes, the display returns to Ready.
<p>Grey background</p> 	<p>Clean the main charger units. Open the left cover. Slowly pull the green wire cleaner knob to each of the main charger units in and out a few times. For full details, see <i>Cleaning the Main Charger Unit</i> on page 4-8.</p> <p>Check the charger units installation. Open the left cover and check that the charger units are correctly installed and seated as far as it will go. see <i>Cleaning the Printer</i> on page 4-8.</p> <p>Conduct color calibration either by switching the printer off then on or using the printer operator panel. For full details, see the <i>Using the Operator Panel</i> section in the <i>Advanced Operation Guide</i>.</p>
<p>Dirt on the top edge or back of the paper</p> 	<p>Check the paper chute and the ramp. Pull out the paper transfer unit and check for toner on the paper ramp. Clean the paper ramp using a soft, dry, lint-free cloth. For details, see <i>Cleaning the Paper Transfer Unit</i> on page 4-13.</p> 

Printed Results	Corrective Action
	<p>Clean the main charger units. Open the left cover. Slowly pull the green wire cleaner knob to each of the main charger units in and out a few times. For full details, see <i>Cleaning the Main Charger Unit</i> on page 4-8.</p> <p>Clean the parts in the paper paths—such as the paper cassette, etc.</p> <p>Check the transfer roller. If the transfer roller is dirty with toner, try printing several pages.</p>
<p>Printing incomplete or out of position</p> 	<p>Check that the application software is correctly operated.</p> <p>See <i>Tips</i> on page 5-2.</p>
<p>Skewed-color printout</p> 	<p>Conduct color registration using the printer operator panel. For full details, see the <i>Using the Operator Panel</i> section in the <i>Advanced Operation Guide</i>.</p>

Error Messages

The following table lists errors and maintenance messages that you can be dealt with by yourself. If **Call service** appears, turn off the printer, disconnect the power cord, and contact your service technician.

Some errors cause the alarm to sound. To stop the alarm, press **[CANCEL]**.

Message	Corrective Action
Add paper MPTray	The paper has run out in the paper source displayed. Supply paper according to the paper source displayed (paper cassettes, MP tray, optional paper feeders, or optional envelope feeder). This message is displayed alternately with messages indicating the printer status, such as, Ready, Please wait, Processing, Waiting, and Form Feed Time Out.
Call service F###:	F### represents a controller error (#=0, 1, 2, ...). Call for service. The printer does not operate when this message is displayed.
Call service ####:0123456	#### represents a mechanical error (#=0, 1, 2, ...). Call for service. The printer does not operate when this message is displayed. The total number of pages printed is also indicated, e.g. 0123456.
Cassette # not loaded	The corresponding paper cassette is not installed. Install the cassette. The cassette number can be 1 (topmost) to 4 (bottom).
Check waste toner box	This message warns following two cases. Install the new waste toner box. The waste toner box is not installed. The waste toner box is full.
Clean printer Press GO	Please clean the inside of the printer. See <i>Cleaning the Printer on page 4-8</i> . This message will be displayed when replacing the toner container after the message Replace toner C, M, Y, K is displayed. After cleaning the inside of the printer, press [GO] and the printer will be ready for printing.
Close duplexer rear unit	The rear unit of the optional duplexer is open. Close the duplexer rear unit.
Close duplexer top cover	The top cover of the optional duplexer is open. Close the duplexer top cover.
Close paper transfer unit	The paper transfer unit is open. Close the paper transfer unit.
Close left cover	The left cover of the printer is open. Close the left cover.

Message	Corrective Action
Close rear cover	The rear cover of the printer is open. Close the printer rear cover.
Close top cover	The top cover of the printer is open. Close the printer top cover.
Duplex disabled Press GO	You attempted to print with a paper size and paper type that cannot be used for duplex printing. Press [GO] to print onto one-side of the paper only.
e-MPS not stored Press GO	The e-MPS job cannot be stored because RAM disk is disabled, RAM disk size is insufficient, hard disk is not installed, or hard disk is full. Press [GO] to print error report.
File not found Press GO	You have attempted to print a job that is not contained in the specified virtual mailbox, or the specified virtual mailbox is not found. If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time. For details on Auto Error Clear, refer to <i>Using the Operator Panel</i> , section of the <i>Advanced Operation Guide</i> .
Format error Hard disk	The hard disk installed in the printer is not formatted, and therefore cannot be read or written. To format the hard disk, follow the procedure in the Installation Guide of the hard disk.
Format error Memory card	The memory card inserted in the printer is not formatted, and therefore cannot be read or written. To format a memory card, follow the procedure in <i>Using the Operator Panel</i> , section of the <i>Advanced Operation Guide</i> .
Hard disk err ## Press GO	A hard disk error has occurred. Look at the error code given in place of ## and refer to <i>Storage Error Codes on page 5-12</i> . To ignore the hard disk error, press [GO] .
I/F occupied	This message is displayed when you attempt to use the printer's operator panel to change the environmental settings on the interface from which data are presently being received.
ID error	The user ID entered for a private job, or a stored job is not correct. Check the user ID that you specified on the printer driver.
Insert the same memory card	You have inserted the wrong memory card when the <i>Insert again</i> message was displayed. Remove the wrong memory card from the printer's memory card slot and insert the correct memory card. The printer again reads it from the beginning of the data.
Install MK	Replace Maintenance Kit which is displayed on the message display. Replacement of the maintenance kit is necessary at every 200,000 images of printing and requires professional servicing. Contact your service technician.

Message	Corrective Action
KPDL error ## Press GO	<p>Current print processing cannot continue because of occurrence of KPDL error which is categorized by ##. To print out an error report, display > Print KPDL err(s) from the menu system, and select On. Press [GO] to resume printing. You can abandon printing by pressing [CANCEL].</p> <p>If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time. For details on Auto Error Clear, refer to <i>Using the Operator Panel</i>, section of the <i>Advanced Operation Guide</i>.</p>
Load Cassette # (A4)/(PLAIN) [†]	<p>The paper cassette matching the paper size and paper type of the print job is empty. Load paper into the paper cassette as displayed in place of #. Press [GO] to resume printing.</p> <p>If you want to print from a different paper source, press Δ or ∇ to display <i>Use alternative</i> and you can change the source for paper feeding. After selecting a paper source and pressing [MENU], <i>Paper Handling ></i> appears. By pressing the Δ, the paper type settings menu appears. After setting the correct paper type, press [ENTER] and printing starts. For details, see <i>Using the Operator Panel</i>, section of the <i>Advanced Operation Guide</i>.</p>
Load EF (A5)/(PLAIN) [†]	<p>There is no paper cassette installed in the printer that matches the paper size and paper type of the print job. Set paper in the envelope feeder. Press [GO] to resume printing. (Note that feeding the paper having a paper size which does not match the current paper size from the envelope feeder can cause paper jam.)</p> <p>If you want to print from a different paper source, press Δ or ∇ to display <i>Use alternative</i> and you can change the source for paper feeding. After selecting a paper source and pressing [MENU], <i>Paper Handling ></i> appears. By pressing the Δ, the paper type settings menu appears. After setting the correct paper type, press [ENTER] and printing starts. For details, see <i>Using the Operator Panel</i>, section of the <i>Advanced Operation Guide</i>.</p>
Load MP Tray (A4)/(PLAIN) [†]	<p>There is no paper cassette installed in the printer that matches the paper size and paper type of the print job. Set paper in the MP tray. Press [GO] to resume printing. (Note that feeding the paper having a paper size which does not match the current paper size from the MP tray can cause paper jam.)</p> <p>If you want to print from a different paper source, press Δ or ∇ to display <i>Use alternative</i> and you can change the source for paper feeding. After selecting a paper source and pressing [MENU], <i>Paper Handling ></i> appears. By pressing the Δ, the paper type settings menu appears. After setting the correct paper type, press [ENTER] and printing starts. For details, see <i>Using the Operator Panel</i>, section of the <i>Advanced Operation Guide</i>.</p>
Memory card err Insert again	<p>The memory card is accidentally removed from the printer's memory card slot during reading. If you continue reading the memory card, insert the same memory card into the slot again. The printer again reads it from the beginning of the data. Also see <i>Insert the same memory card</i>.</p>
Memory overflow Press GO	<p>The total amount of data received by the printer exceeds the printer's internal memory. Try adding more memory. Press [GO] to resume printing. You can abandon printing by pressing [CANCEL].</p> <p>If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time. For details on Auto Error Clear, refer to <i>Using the Operator Panel</i>, section of the <i>Advanced Operation Guide</i>.</p>

Message	Corrective Action
MemoryCard err## Press GO	A memory card error has occurred. Look at the error code given in place of ## and refer to <i>Storage Error Codes on page 5-12</i> . To ignore the memory card error, press [GO]
Missing duplex drawer	The duplex drawer is either not installed or incorrectly inserted. Insert the duplex drawer securely.
No multi copies Press GO	Multi copies cannot be printed because RAM disk is disabled or the hard disk is not installed. Press [GO] to print error report.
Paper jam #####	A paper jam has occurred. The location of the paper jam is indicated in place of the #'s. For details, see <i>Clearing Paper Jams on page 5-14</i> .
Paper path error	There is no paper cassette in the feeder, or the cassette is not inserted properly. After reinserting the paper cassette, you should be able to print. When two or more optional feeders are installed and the lowest one is selected, the same message will appear if any of the upper paper feeder and the printer cassette is improperly installed.
Print overrun ^{††} Press GO	The print job transferred to the printer was too complex to print on a page. Press [GO] to resume printing. (A page break may be automatically inserted in some places.) You can abandon printing by pressing [CANCEL] . If Auto Error Clear is set to On, printing will be automatically resumed after a preset period of time. For details on Auto Error Clear, refer to <i>Using the Operator Panel</i> , section of the <i>Advanced Operation Guide</i>
RAM disk error## Press GO	A RAM disk error has occurred. Look at the error code given in place of ## and refer to <i>Storage Error Codes on page 5-12</i> . To ignore the RAM disk error, press [GO] .
Replace toner C,M,Y,K ↓ ↑ Replace toner Clean printer	Two message items are displayed alternately. Toner has run out in the toner container(s). Replace the toner container using a new toner kit for the particular color. The printer does not operate when this message is displayed. For example, if Replace toner C,K is displayed, replace the cyan and the black toner containers.
Set paper Press GO	The MP tray is out of paper. Load paper and press [GO] . (Note that feeding the paper having a paper size which does not match the current paper size from the MP tray can cause paper jam.)
Toner low C,M,Y,K	Replace the toner container using a new toner kit. Color of the toner container that needs to be replaced is represented by C (Cyan), M (Magenta), Y (Yellow), and K (Black).
Top tray paper full	The top tray has become full (approx. 250 pages). You must remove all printed pages from the top tray. When the printer detects that the top tray is empty again, the printer will continues printing into the top tray.

Message	Corrective Action
Virtual mailbox full	The storage area in the hard disk for the virtual mailboxes is full. Print out accumulated jobs in the virtual mailboxes.
Warning low memory	The printer's internal memory is running low due to too many numbers of fonts and macros downloaded. Try deleting unnecessary fonts and macros.

† Messages separated by '()/()' are displayed alternately.

†† After this error has happened, page protect mode will be automatically turned on. To maintain optimum use of memory during printing, we recommend you manually turn off page protect mode. See the *Using the Operator Panel*, section of the *Advanced Operation Guide*.

Storage Error Codes

Hard Disk Errors

Code	Meaning
01	Hard disk format error. If this error recurs even if the power has been turned off and then on, reformat the hard disk.
02	The disk system is not installed. Recheck the requirements for using the system and the devices.
04	There is no available hard disk space. Delete unnecessary files, etc., in order to free up space.
05	The specified file does not exist in the hard disk.
06	There is no memory available to the hard disk system. Increase the available memory.
10	Formatting is not possible because host data is being spooled on the hard disk. Wait until the hard disk is ready, and then format.
85	VMB: Alias error. The alias setting was lost, or the virtual tray corresponding to the alias does not exist. Set the alias again.
97	The number of permanent code jobs that can be stored reached the limit value, and no more can be saved. Either delete some unnecessary jobs, etc., or increase the limit.
98	An unreadable page was found in a job (The job is damaged.).
99	A print job for the specified ID does not exist in the hard disk.

Memory Card Errors

Code	Meaning
01	The printer does not support the memory card inserted. The memory card must meet the requirements described in the <i>Options</i> , section of the <i>Advanced Operation Guide</i> .
02	The memory card is not installed.
04	The memory card is full and cannot hold further data. Purge unnecessary files or use a new memory card.
05	Specified file is not on the memory card.
06	Insufficient printer memory to support the memory card system. Expand printer memory.

RAM Disk Errors

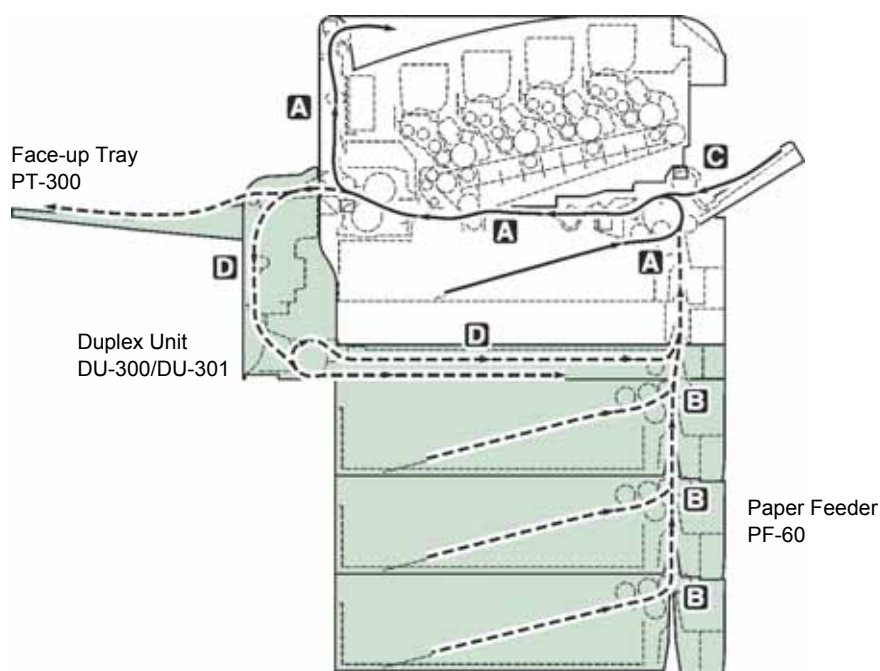
Code	Meaning
01	Format error. Try turning the power off and on again.
02	RAM disk mode is <code>OFF</code> . Turn RAM disk mode On from the operator panel.
04	No disk space. Purge unnecessary files.
05	Specified file is not on disk.
06	Insufficient printer memory to support the RAM disk system. Expand printer memory.

Clearing Paper Jams

If the paper jammed in the paper transport system, or no paper sheets were fed at all, the **Paper jam** message appears and the location of the paper jam (the component where the paper jam has occurred) is also indicated. The printer automatically goes off-line when this message is displayed. Remove jammed paper. After removing jammed paper, the printer will re-start printing.

Possible Paper Jam Locations

The figure below explains the printer's paper paths including the options. The locations where paper jams might occur are also shown here, with each location explained in the table below. Paper jams can occur in more than one component on the paper paths.



Paper jam message	Paper jam location	Description	Reference page
Paper jam Printer	A	Paper is jammed at paper cassette 1 or inside the printer.	page 5-16
Paper jam Cassette 2 (to 4)	B	Paper is jammed at the optional paper feeder's cassette.	page 5-19

Paper jam message	Paper jam location	Description	Reference page
<div>Paper jam MP Tray</div> <div>Paper jam EF</div>	C	Paper is jammed at the MP tray or optional envelope feeder (if installed).	page 5-18 page 5-19
<div>Paper jam Duplexer</div>	D	Paper is jammed inside the rear cover of the optional duplexer or at the duplexer drawer.	page 5-19


General considerations for clearing jams

Bear in mind the following considerations when attempting jam removal:

CAUTION: When pulling the paper, pull it gently so as not to tear it. Torn pieces of paper are difficult to remove and may be easily overlooked, deterring the jam recovery.

- If paper jams occur frequently, try using a different type of paper, replace the paper with paper from another ream, flip the paper stack over, or rotate the paper stack 180 degrees. Selection of paper is fully discussed in the *Handling Paper* section in the *Advanced Operation Guide*. The printer may have problems if paper jams recur after the paper was replaced.
- Whether or not the jammed pages are reproduced normally after printing is resumed depends on the location of the paper jam.

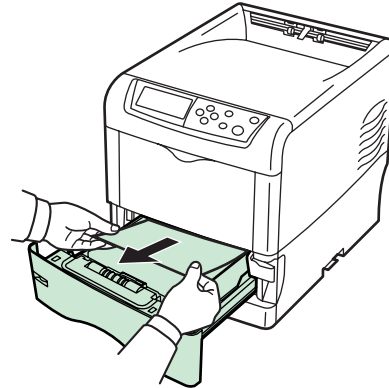
Utilizing Online Help Messages

Online help messages are available in the printer's message display to provide simple instructions for clearing jams. Press () when the paper jam message has appeared. Then a help message will appear to facilitate jam clearing in the location.

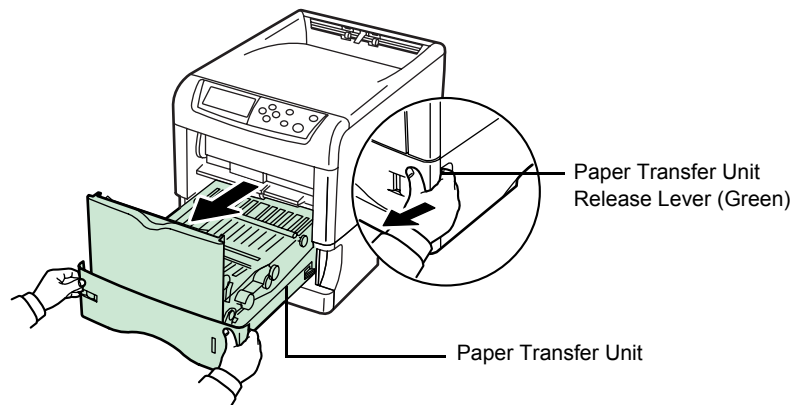
[Paper jam Printer]

Paper is jammed at the paper cassette or inside the printer. Remove the jammed paper using the procedure given below.

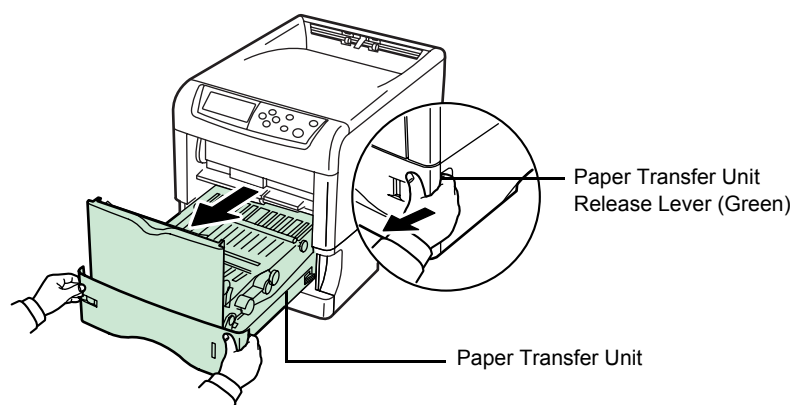
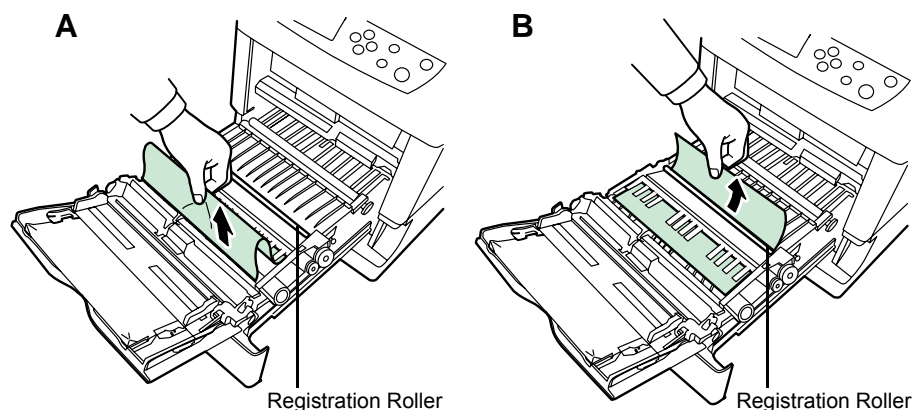
- 1 Pull out the paper cassette and remove the jammed paper.



- 2 While pulling the green paper transfer unit release lever, pull out the paper transfer unit.

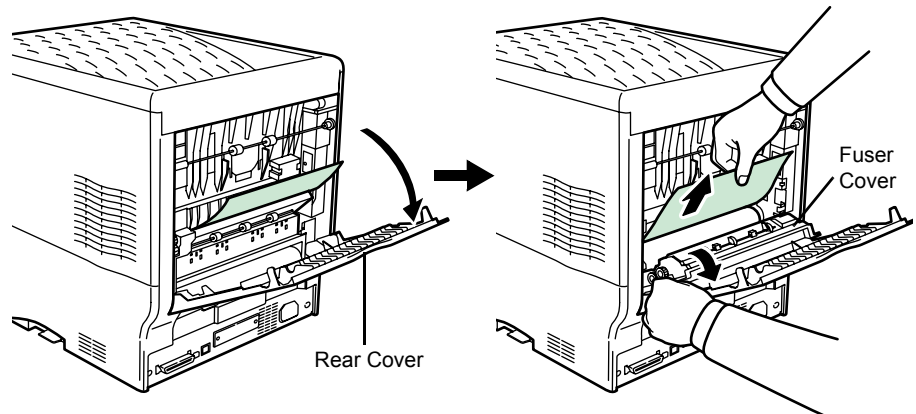


- 3** If paper is jammed as shown in **A**, remove the paper by pulling the center up. If paper is jammed as shown in **B**, remove the paper by pulling the edge.



- 4** Open the rear cover and then the fuser cover, and remove the jammed paper.

NOTE: If the optional face-up tray is installed on the printer, remove that tray first before attempting to remove the jammed paper.



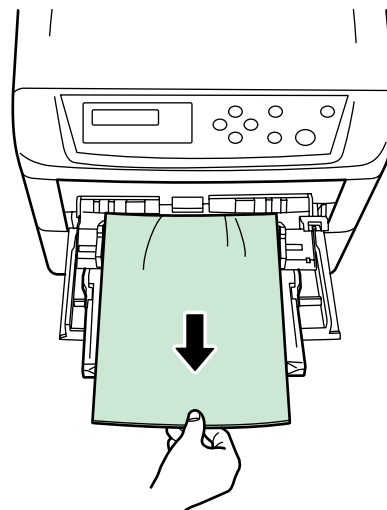
CAUTION: The fuser unit inside the printer is hot. Do not touch it with your hands as it may result in burn injury. Remove jammed paper carefully.

- 5 Push the paper transfer unit back in and close the fuser cover and rear cover.

[Paper jam MP Tray]

Paper is jammed at the MP tray. Remove the jammed paper using the procedure given below.

- 1 Remove the paper jammed at the MP tray.



- 2 Open and close the paper transfer unit (the paper jam error will be reset).

[Paper jam Cassette 2 (to 4)]

Paper is jammed at optional paper cassette 2 (to 4). Refer to the Operation Guide for the optional paper cassette and remove the jammed paper.

[Paper jam EF]

Paper is jammed at the optional envelope feeder. Remove the jammed paper using the same procedure as for a jam at the MP Tray. Then, open and close the paper transfer unit. For details, refer to the User's Manual for the envelope feeder.

[Paper jam Duplexer]

Paper is jammed inside the rear cover of the optional duplexer or at the duplexer drawer. Refer to the Operation Guide for the duplexer and remove the jammed paper.

6 Specifications

NOTE: Specifications are subject to change without notice.

Item	Description
Printing Method	Electrophotographic four color (CMYK) printing using Advanced Beam Array
Printing Speeds - Cassette - MP Tray	A4: 16ppm B5, A5, Letter: 17ppm Legal: 14ppm A4: 15ppm B5, A5, Letter: 16ppm Legal: 13ppm
Paper Sizes - Cassette - MP Tray	A4, B5, A5, Folio, 8 1/2 x 14"(Legal), 8 1/2 x 11"(Letter), Oficio II, Executive, ISO B5, Envelope C5, 16K, and Custom A4, B5, A5, Folio, 8 1/2 x 14"(Legal), 8 1/2 x 11"(Letter), Oficio II, Statement, Executive, A6, B6, ISO B5, Env. Monarch, Envelope #10, Envelope #9, Envelope #6, Envelope DL, Envelope C5, 16K, Hagaki, Oufuku-Hagaki, Youkei 2, Youkei 4, and Custom
Paper Types - Cassette - MP Tray	Plain, preprinted, bond, recycled, rough, letterhead, color, prepunched, high quality, and custom Plain, transparency, preprinted, labels, bond, recycled, vellum, rough, letterhead, color, prepunched, envelope, cardstock, coated, thick, high quality, and custom
Paper Feed Source Capacity - Cassette - MP Tray	500 sheets (80g/m ²) 100 sheets (80g/m ²)
Output Tray Capacity - Top Tray - Face-up Tray (Option)	250 sheets (80g/m ²) 250 sheets (80g/m ²) [100 sheets (80g/m ²) when the optional duplex unit is installed.]
Warm-up Time (23°C, 60%RH) - Power on - Sleep	80 seconds or less 80 seconds or less

Item	Description
First Print Out (A4, 23°C, 60%RH)	
- Ready	16 seconds or less
- Sleep	96 seconds or less
Resolution	600 dpi
Monthly Duty	
- Average	4,000 pages
- Maximum	85,000 pages
Operating Systems	Microsoft Windows 95/98/Me/2000/XP Microsoft Windows NT4.0 Apple Macintosh OS 9 Apple Macintosh OS X
Controller	PowerPC750CXR 400MHz
Memory	
- Standard	128MB
- Maximum	1024MB (512MB x 2)
Interface	
- Standard	USB: Hi-Speed USB Parallel: IEEE1284 Network: 10BASE-T/100BASE-TX KUIO-LV slot
- Option	IB-11: Serial IB-20: 10BASE2/10BASE-T/100BASE-TX IB-21E: 10BASE-T/100BASE-TX IB-22: IEEE802.11b (Wireless)
Operation Environment	
- Temperature	10 - 32.5 °C (50 - 90.5 °F)
- Relative Humidity	20 - 80 %
- Altitude	2,000m (6547 feet) maximum
- Illumination	1,500 lux maximum
Dimensions	385 x 345 x 470mm 15.2 x 13.6 x 18.5"
Weight (without toner container)	Approx. 22kg (48.6lbs)
Operating noise (in accordance with ISO7779 [Bystander Position, sound pressure level at the front])	During printing: LpA = 53dB (A) During standby: LpA = 36dB (A) During sleep mode: immeasurably low

**QUALITY
CERTIFICATE**

This machine has passed
all quality controls and
final inspection.

